CLAIMS:

10

25

- 1. An echo canceller, characterised in that the echo canceller comprises a dedicated non stationary echo canceller.
- The echo canceller according to claim 1, characterised in that the non
 stationary echo canceller comprises a stationary echo estimator and/or a non stationary echo estimator.
 - 3. The echo canceller according to claim 2, characterised in that the stationary echo estimator is a stationary noise estimator.
 - 4. The echo canceller according to claim 3, characterised in that the stationary noise estimator is based on minimum statistics.
- 5. The echo canceller according to one of the claims 1-4, characterised in that the echo canceller comprises an adaptive filter and a residual echo processor coupled to the adaptive filter, which residual echo processor is equipped with the non stationary echo canceller.
- 6. The echo canceller according to one of the claims 1-5, characterised in that
 the echo canceller comprises comfort noise inserting means.
 - 7. A communication device, such as for example a speakerphone or teleconferencing device, a telephone device, in particular a mobile telephone, a hands-free telephone or the like, characterised in that the communication device comprises one or more echo cancellers according to one of the claims 1-6.
 - 8. A method for cancelling echoes in a communication network comprising one or more communication devices according to claim 7, characterised in that non stationary echoes are being cancelled by post processing.

PCT/IB2003/002275

9. Signals suitable for use in the method according to claim 8, characterised in that the signals allow only non stationary echoes to be cancelled.